SAFETY BULLETIN

SB-01-018 - ULTRAVIOLET RADIATION

Am I At Risk? June 2001 (Initial)

Did you know that the number of new skin cancer cases, and the number of deaths caused by the most serious type of skin cancer are rapidly rising in the United States? This is particularly troubling since the numbers for most cancers have been declining. Sunlight is the main source of Ultraviolet Radiation (UV) known to damage the skin and to cause skin cancer. The amount of UV exposure depends on the strength of the light, the length of exposure, and whether the skin is protected. There are no safe UV rays or safe suntans. Sun exposure at any age can cause skin cancer. Your skin and eyes are most susceptible to sun damage. You need to be especially careful in the sun if you have numerous moles, irregular moles, or large moles; freckles or burn before tanning; fair skin; blond, red or light brown hair; or spend a lot of time outdoors.

Melanoma is the most serious type of skin cancer, and accounts for more than 75 percent of the deaths due to skin cancer. In addition to skin cancer, sun exposure can cause premature aging of the skin, wrinkles, cataracts, and other eye problems.

How Do I Protect Myself From UV Radiation? If you work outdoors, there are five important steps you can take to protect yourself against UV radiation and skin cancer:

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- Cover up. Wear clothing to protect as much of your skin as possible. Wear clothing that
 does not transmit visible light. To determine if the clothing will protect you, try this test: Place
 your hand between the fabric and a light source. If you can see your hand through the fabric,
 then the garment offers little protection against sun exposure.
- 2. Use a sunscreen with a Sun Protection Factor (SPF) of 15 or higher. Experts recommend products with a SPF of at least 15. The number of the SPF represents the level of sunburn protection provided by the sunscreen. An SPF 15 blocks out 93 percent of the burning UV rays; an SPF 30 blocks out 97 percent of the burning UV rays. Products labeled "broad spectrum" block both UVA and UVB radiation. Both UVA and UVB contribute to skin cancer. UVA is the most abundant type of solar radiation and penetrates the top layers of the skin. UVB is another form of solar radiation, which does not penetrate as deep into the skin. Apply sunscreen liberally at least 15 minutes before going outside. Reapply every 2 hours or more frequently if you sweat a lot or are swimming. Warning: Do not depend on sunscreens alone. Combine sunscreen with wide-brimmed hats, UV-protective sunglasses, and tightly woven clothing to increase your protection against UV radiation.
- 3. Wear a hat. A wide brim hat is ideal because it protects the neck, ears, eyes, forehead, nose, and scalp. A baseball cap provides some protection for the front and top of the head, but not for the back of the neck or the ears where skin cancers commonly develop.

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